

## **Community IPM Outreach Efforts for 2016**

### **Project Leader(s):**

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### **Abstract:**

The core mission of the Community IPM Program is to provide New Yorkers with safe and effective solutions to manage pests where people live, work, learn and play. Because the field of Community IPM is vast, including all aspects of life that are not associated with growing food or commercial horticultural, the practices promoted by this program apply to all New Yorkers, and help to reduce health and environmental risks associated with pest management practices. In 2016, Community IPM staff engaged diverse audiences in New York and other states in two important and effective ways.

The Community IPM Program provided over 10,000 contact hours of in-person presentations, workshops and seminars. These face-to-face meetings offer participants the opportunity to ask questions of experts in a comfortable environment, obtain contact information, and learn about resources available from the NYS IPM. Program staff provided site visits to address specific pest problems and appeared in public media.

To complement the appearance of IPM staff at events, meetings and on television, social media and other internet-based resources continued throughout 2016. In this age of technology, countless sources of information related to pest biology and management are available. However, many non-university resources are inaccurate and may provide recommendations that are illegal or unsafe. Therefore, IPM staff used social media to point individuals to research-based information while also generating a new fact sheet, blogs, and webinars. IPM staff also contributed to trade magazines. Because this content is available in several formats, this increases the reach of the Community IPM program and the possible adoption of IPM strategies.

### **Background and Justification:**

Among New Yorkers, familiarity with the term “integrated pest management” is somewhat low. However, when the tenets of IPM are explained, a majority of people feel that an integrated approach is most desirable because it reduces the risks presented by household and public health pests, and the methods used to control them. Therefore it is essential to the mission of the NYS IPM program that community outreach efforts generate an increase in awareness of IPM, ideally leading to increased adoption of IPM strategies. This is accomplished by changing decision-making behaviors of people seeking to control pests, which occurs over time with persistent effort.

Educational programs that result in an improved ability to identify pests can reduce the reliance on pesticides for management. This is because accurate identification provides information about an organism's food preferences, life cycle, and preferred harborage sites. While Master Gardener Volunteers can use this information to provide management recommendations for homeowners, pest professionals can hone in on infestation sites and employ sanitation and exclusion techniques to directly reduce pest populations. Thus, a major emphasis of education by IPM staff is to enhance the ability of New Yorkers to accurately identify pests.

In order to reach diverse audiences in New York State, including those in various age groups, program staff promoted the IPM Image Gallery on Flickr, the NYS IPM Facebook page, YouTube Channel and Twitter account, and the NYS IPM and School IPM Blogs. The use of multiple outlets for disseminating information is based on the premise that different generations obtain information in various ways. Whereas older generations prefer hard-copy materials, such as fact sheets, younger generations gather most of their information in short posts and through social media. By adjusting our messages to appear in different formats, we are able to reach diverse audiences and enhance adoption of IPM principles.

#### **Objectives:**

- To increase the awareness of New Yorkers about integrated pest management and the best ways to reduce their risk from household and public health pests, including the pesticides used to manage them.
- To create educational materials for community IPM awareness that are easily accessible to New Yorkers and beyond.
- To promote sustainable landscapes as a method of implementing IPM to manage both indoor and outdoor pests.

#### **Activities:**

##### **I. Traditional Outreach**

###### *Collaboration and Information Sharing*

Each year, the Community IPM Coordinating Council meets to provide updates on funding, projects and other endeavors of participating individuals and organizations. In 2016, the Council invited stakeholders to speak at meetings on topics relative to IPM:

- Dr. Robert Corrigan, RMC Pest Management Consulting, Inc., discussed rodent exclusion and the direction that The Scientific Coalition of Pest Exclusion is heading.
- Nancy Lerner, Albany CCE, described the Healthy Neighborhoods Program efforts in Albany County and beyond.
- Dr. Jason Munshi-South, Louis Calder Center Fordham University, gave a presentation on the population genomics of rats in New York City.
- Jason Dombroskie, Sr. Extension Assoc., Dept. of Entomology described the recent trends of samples being submitted to the Cornell Insect Diagnostic Laboratory.

###### *CIPM Grants Program Coordination*

The 2016 CIPM Grants program attracted thirteen proposals. The Community IPM Coordinating Council reviewed these proposals and ranked them in order of priority and likelihood of success

for funding. Ten projects were funded. A separate report for each funded project is available from the NYS IPM Program. Funded projects included:

- Productive Landscapes: a needs assessment and program pilot “shell” for gardeners ready to scale up to increase IPM knowledge, garden productivity and site sustainability.
- New York State Tiger Mosquito Education Network (TigerNET)
- Tick Treatments: Getting the Most Out of Private Control Programs While Protecting Water Quality
- Demonstrating IPM Techniques to Improve Home Lawn Quality Without Pesticides
- Pheromone Based Mating Disruption as an Alternative Grub Control Strategy for School and College Athletic Fields
- Evaluating and Mitigating Canada Goose Impacts to Parks, Schools, and Golf Courses
- Use of Attract-and-Kill Netting to control BMSB in Urban Areas
- [Video Case Study on Pollinator Best Management Practices \(BMPs\)](#)
- Pollinator demonstration garden at CCE Putnam’s public demonstration and teaching garden: Plant materials and interpretive signage
- Implementation of Biocontrol in an Educational Greenhouse

#### *IPM Staff Contributions to Media Outreach*

- Matt Frye discusses mouse issues in Co-ops in the New York Times: <http://tinyurl.com/j7mnadp>
- Matt Frye is quoted in an article about kudzu: <http://wonkonthewildlife.com/kudzu-weeds-beaten-no-chemicals-needed/>
- Matt Frye discusses how feral cats are not effective rat exterminators: <http://www.marketwatch.com/story/are-these-cats-the-answer-to-chicagos-rat-problem-2016-05-02>
- Matt Frye interviewed for the proposed use of feral cats as management tool for rats: [www.marketwatch.com/story/are-these-cats-the-answer-to-chicagos-rat-problem-2016-05-02](http://www.marketwatch.com/story/are-these-cats-the-answer-to-chicagos-rat-problem-2016-05-02)
- Matt Frye was interviewed on MetroFocus about New York City Rats: [www.thirteen.org/metrofocus/2016/12/new-rat-city/](http://www.thirteen.org/metrofocus/2016/12/new-rat-city/)
- Matt Frye discusses his role with the New York State IPM Program on Trish Time: [www.youtube.com/watch?v=PDXY4gfLYtY&feature=youtu.be](http://www.youtube.com/watch?v=PDXY4gfLYtY&feature=youtu.be)
- Matt Frye provides tips for personal protection against ticks: [www.poughkeepsiejournal.com/story/news/local/2016/06/27/lyme-forum-offers-tips-preventing-illness/86443100/](http://www.poughkeepsiejournal.com/story/news/local/2016/06/27/lyme-forum-offers-tips-preventing-illness/86443100/)
- Jody Gangloff-Kauffman discusses the comeback of the nine-spotted ladybug: <http://www.newsday.com/news/region-state/nine-spotted-ladybug-makes-ny-comeback-with-breeding-program-1.12130483>
- Jody Gangloff-Kaufmann discusses the prevalence of spring insects: <http://www.stargazette.com/story/news/local/2016/04/18/watch-out-ticks-other-bugs-plentiful-2016/83118086/>
- Jody Gangloff-Kaufmann weighs in on clothes moths: <http://www.nydailynews.com/life-style/scary-moths-eat-clothes-article-1.2836988>
- Jody Gangloff-Kaufmann discusses stink bugs: <http://www.newsday.com/lifestyle/columnists/jessica-damiano/stink-bugs-invading-long-island-1.12504017>

- Jody Gangloff-Kaufmann discusses bed bugs in hotels:  
[https://www.nytimes.com/2016/03/01/business/for-hotels-bedbugs-are-bad-enough-and-social-media-adds-to-irritation.html?\\_r=0](https://www.nytimes.com/2016/03/01/business/for-hotels-bedbugs-are-bad-enough-and-social-media-adds-to-irritation.html?_r=0)
- Jennifer Grant advises homeowners on getting the lawn back in shape in the spring:  
<http://www.ithacajournal.com/story/news/local/2016/05/02/ready-get-your-lawn-back-shape-heres-how/83832418/>.
- “[Exclusion: The Future of Pest Management](#)”, Dr. Matthew Frye, PCT Magazine, August 2016

## II. Internet-Based Outreach

### *Social Media, Blogs and YouTube*

Images, news stories and announcements are posted daily to the NYS IPM Facebook page by IPM staff. In 2016, the page rose from 519 followers to 617 organically (without paid advertisements), with hundreds of people talking about the over 680 posts, and a total reach of thousands of people. The average weekly page reach was 889, with a maximum of 2,489 and a minimum of 104. The page engages an average of 78 people each week. In 2016, Twitter account @NYSIPM gained 74 followers and generated almost 97,800 impressions (interactions) from 107 tweets; @IPM\_School&Childcare gained 26 new followers and generated 29,000 impressions from 337 tweets. These numbers illustrate a continued need to improve online reach and presence in the minds of New Yorkers. Social Media provides a platform to accomplish outreach to otherwise unknown and under-reached audiences.

The NYS IPM and School IPM Blogs were created to offer useful information in a narrative format. The NYS IPM blog, *ThinkIPM*, covers all IPM commodities (fruit, vegetable, livestock, greenhouse, community, etc.) and is distributed to 91 subscribers. Blog posts can also be accessed when Facebook and Twitter users click on links posted in these platforms. Thus, in 2016 there were almost 15,000 unique visitors and over 23,000 pageviews. Community-related posts have addressed the biology, management and regulations regarding rodents, stinging insects, invasive species, turf management, mosquitoes, and ticks. To date, the *ABCs of School and Childcare Pest Management* blog is distributed to 32 subscribers and posts have been promoted on the NYS IPM Facebook page and Twitter feed leading to 1,220 unique visitors and over 4,305 pageviews. Our goal in 2017 is to increase subscribers to both NYS IPM blogs.

### *Image Gallery on Flickr*

The IPM Image Gallery continues to grow, with over 2,570 unique images and 16 videos categorized into 58 albums. A name and brief description is given to each image and key words are added to help users find the images on common search engines such as Google. In many cases, links to resources from the NYS IPM website are present in the image’s description.

Since its inception, there have been over 420,000 views. Images are posted to the program’s Facebook page, have been used in professional presentations, and are linked to IPM resources. One expected outcome of the image gallery is that individuals using Google Image search will encounter our photographs when looking up a pest and will subsequently have access to accurate information, including identification and treatment methods. We continue to tag

images with key words and cross-reference them with pertinent pest management information on the IPM website as it becomes available.

Many of the most popular community IPM images highlight bed bugs, stinging insects, pollinators, and NYS IPM events. Flickr views are being monitored to help determine public interest for information on a variety of subjects and will help to inform a list of resources to be developed in the coming year.

#### *IPM Staff Contributions to Trade and Professional Publications*

- “Site Specific Management of Nuisance Geese on School Properties: A Case Study from New York State.” L. Braband, S. Wheatcraft, J. Lampman, J. Eckler. Poster paper at the 2016 Annual Meeting of The Wildlife Society, Raleigh, NC, October 16-19, 2016.
- “Exclusion: The Future of Pest Management.” MJ Frye. August 2016. PCT Magazine, GIE Media, Inc., Richfield OH. pp. 54,79-81,84.
- “Bed Bug Education” A. Taisey and J. Gangloff-Kaufmann in *Advances in the Biology and Management of Modern Bed Bugs*, John Wiley & Sons, Inc. NJ. (in press).

#### *Service*

All staff responded to e-mails, phone calls, walk-ins, eXtension, Facebook, etc. on a variety of topics related to pest management in private homes, office buildings, schools, childcare facilities, sleep-away camps, nursing homes, public housing, private lawns, and sports fields.

#### *Presentations*

Presentations (including school, tick, and wildlife IPM presentations that are also listed in other reports). Contact hours are a measure of the number of participants and the duration of time spent (ex. for 10 participants in a 1 hour session, the contact hours would be 10 \* 1 = 10 hours).

Date	Location (County)	Conference/Meeting Name	Presentation Title	Contact Hours
1/4/2016	Philadelphia, PA	Northeast Plant, Pest, and Soils Conference	Harboring Secrets: Pathogens and Ectoparasites of New York City Rats	11.55
1/13/2016	Yonkers (Westchester)	NYSTLA Conference	Ecology of Lawns	73.5
1/14/2016	Pocono Manor, PA	Eastern Conference	New Arrival: Emerging and Invasive Pests	60
1/21/2016	Upton (Suffolk)	Long Island Horticulture Conference	Tree and Shrub IPM	90
1/23/2016	Liverpool (Onondaga)	Winter CTFANY Convention	Snakes, Ticks, & Bees, Oh My!	40
1/27/2016	Middletown (Orange)	2016 Hudson Valley Nursery and Greenhouse Growers School	Alternatives to Invasive plants	30
1/28/2016	Fishkill (Dutchess)	Southeast Regional Conference	Tick Management and Control Strategies	67
1/28/2016	Hauppauge (Suffolk)	PCALI Spring workshop	Ectoparasites	85
1/28/2016	Fishkill (Dutchess)	NYSTA SE Regional Conference	IPM Systems for Turf in the Landscape	78.75

1/28/2016	Fishkill/Dutchess	2016 Southeast Regional Conference	Troubleshooting problems of annuals and perennials in the landscape	65
1/28/2016	Fishkill/Dutchess	2016 Southeast Regional Conference	Forecasting insect and disease pressure in 2016 on woody ornamentals	50
1/29/2016	Hawthorne (Westchester)	Winter Seminar Series	Scientific Monitoring	78
1/30/2016	Cortland (Cortland)	Master Gardener Training	Weed Management	45
1/30/2016	Cortland (Cortland)	Master Gardener Training	Principles of IPM	45
2/9/2016	Rochester (Monroe)	Landscapers meeting	Ticks & Tick-borne Diseases	7
2/11/2016	Irondequoit (Monroe)	Horticulture School	Plant Pathology	195
2/25/2016	Castleton (Rensselaer)	Supt. of Building & Grounds Meeting	NYS IPM Laws and Stinging Insects	10
2/27/2016	East Syracuse (Onondaga)	Annual NE Wildlife Management Seminar	Managing goose problems at schools	40
2/29/2016	Lynbrook (Nassau)	Arrow Training Program	Filth Flies: Identification, Disease and IPM	68
2/29/2016	Lynbrook (Nassau)	Arrow Training Program	Bed Bugs; A Scientific Update	65
3/1/2016	Webex presentation	30 hour pesticide applicators course	Vertebrate pest management	14
3/2/2016	Owego (Tioga)	2016 Education Day	Forecasting insect and disease pressure in 2016 on woody ornamentals	45
3/7/2016	Minneapolis, MN	Minnesota Pest Management Association annual training	Stinging Insects and IPM	850
3/8/2016	Minneapolis, MN	Minnesota Structural Pest Management Conference	Rodent Biology and Management	850
3/14/2016	Carmel (Putnam)	Putnam County Food Operator's Seminar	Whose Job is it Anyway? Pest Management in Food Establishments	60
3/15/2016	Carmel (Putnam)	Putnam County Food Operator's Seminar	Whose Job is it Anyway? Pest Management in Food Establishments	52.5
3/15/2016	Long Beach (Nassau)	Tenant Meeting and Workshop	Bed Bugs: What You Need to Know	40
3/16/2016	Long Beach (Nassau)	Tenant Meeting and Workshop	Bed Bugs: What You Need to Know	24
3/16/2016	Lake Placid (Essex)	2016 Adirondack Regional Conference	Troubleshooting problems of annuals and perennials in the landscape	37.5
3/16/2016	Lake Placid (Essex)	2016 Adirondack Regional Conference	Forecasting insect and disease pressure in 2016 on woody ornamentals	30
3/22/2016	Latham (Albany)	Albany County Pesticide Recertification Day	Fleas and Bed Bugs: These Insects Bite!	40
3/22/2016	Latham (Albany)	Albany County Pesticide Recertification Day	Policies that Affect PMPs: Are you Compliant?	20
3/22/2016	Latham (Albany)	Albany County Pesticide Recertification Day	Scientific Monitoring	60
3/22/2016	Latham (Albany)	Pesticide Recertification Day	Managing Turf while Protecting Pollinators	98
3/28/2016	Albany (Albany)	SWIGAC meeting	NYS IPM Program Tick Research & Outreach	7



3/29/2016	Geneva (Ontario)	NYSAES Pesticide Update	Biopesticides for Powdery Mildew Management	45
3/31/2016	Merrick (Nassau)	Hands On Training	Urban Integrated Pest Management Short Course	192
4/5/2016	St. Croix, USVI	EPA Region 2 IPM Forum	"Reducing Pesticides in Restaurants, Schools and Hotels"	64
4/6/2016	Greece (Monroe)	Residents meeting	Wild Geese	35
4/6/2016	San Juan, Puerto Rico	EPA Region 2 IPM Forum	"Reducing Pesticides in Restaurants, Schools and Hotels"	94
4/8/2016	Carmel (Putnam)	Pollinator Workshop	"Assessing Pollinators in New York"	70
4/12/2016	Ithaca (Tompkins)	Spring In-Service	NYS IPM Resources	12
4/16/2016	Amityville (Suffolk)	Spring Awakening	"The Charming Garden Residents: Our Native Bees"	130
4/20/2016	Elmsford (Westchester)	Managing Pests Around the Home Series	Fight the Bite! Steps to Avoid and Manage Bed Bugs in the Home	6
4/21/2016	Rochester (Monroe)	SW Community Council meeting	Removing Pests from Your Home Safely & Effectively	6.5
4/22/2016	Delmar (Albany)	Earth Day	Ticks	47
4/26/2016	Oakbrook, IL	McCloud Services Annual Pest Invasion Seminar	Harboring Secrets: Parasites and Pathogens of NYC Rats	375
4/26/2016	Oakbrook, IL	McCloud Services Annual Pest Invasion Seminar	Rodent Exclusion	75
4/26/2016	Troy (Rensselaer)	Code Officials Training	Bed Bugs	25
4/29/2016	Geneva (Ontario)	Department Meeting	Barton Hall: The Case of the Brown Banded Bandits	6
5/3/2016	Delmar (Albany)	Nurses Training	Ticks	18
5/10/2016	Lakeville (Livingston)	Herbicide applicator training	Protecting Yourself from Tick Borne Diseases	70
5/23/2016	Oneida (Madison)	Community meeting	Bed Bugs Suck	8
5/23/2016	Albuquerque, NM	National Conference of Urban Entomology	"The Scientific Coalition of Pest Exclusion"	53
5/24/2016	Albuquerque, NM	National Conference on Urban Entomology	Harboring Secrets: Ectoparasites of Norway Rats in New York City	13.75
6/1/2016	Albany (Albany)		Tick Check: Five Facts About New York's Worse Vector	7.5
6/7/2016	Delmar (Albany)	Health Class	Ticks	36
6/9/2016	Clifton Park (Saratoga)	Tick Educational Program	Ticks	24
6/9/2016		NESIWG conference call	Geese on School Grounds	9
6/15/2016	Elmsford (Westchester)	Managing Pests Around the Home Series	Bed Bug Update for the Industry	5
6/15/2016	Geneva (Ontario)	Turf IPM Meeting	NYS IPM turfgrass efforts	27
6/18/2016	Oriskany (Onieda)	Herb & Flower Fest	Ticks	15
6/27/2016	Hopewell Junction (Dutchess)	Public Forum on Lyme and Tick-Borne Diseases	How to Identify, Avoid and Remove Ticks	20
7/14/2016	Voorheesville (Albany)	CCE Albany 100 Year Anniversary	Tick Table	4

7/15/2016	Albany (Albany)	Science and Technology Entry Program	IPM & Pesticides	37.5
7/20/2016	Elmsford (Westchester)	Managing Pests Around the Home Series	The Dirt on Filth Flies	7
7/20/2016	Mancelona/Michigan (via Webex)	College class on Wildlife Biology	Wildlife Damage Management	10
7/28/2016	Ithaca (Tompkins)	IPM In-depth	Organizer	225
7/28/2016	Ithaca (Tompkins)	IPM In-depth	Greenhouse Virus Diseases and Diagnostic Session	120
7/28/2016	Albany (Albany)	Bed Bug Training	Fight the Bite! Bed Bug IPM	35
7/28/2016	Albany (Albany)	Bed Bug Training	Fight the Bite! Bed Bug IPM	8
8/15/2016	Voorheesville (Albany)	Tools for Climate Change Conference	Organizer (Includes presentation on Cornell Climate Change Garden)	315
8/16-21/16	Altamont (Albany)	Altamont Fair	CIPM Table, Tick Table	100
8/27/2016	Penfield (Monroe)	Community outreach	Ticks & Tick-borne Diseases	2.5
8/31-9/5/16	Schaghticoke (Rensselaer)	Schaghticoke Fair	CIPM Table	50
9/10/2016	Walworth (Wayne)	Annual Meeting & Field Day	Conifer Pest Management	24
9/13/2016	Irondequoit (Monroe)	Master Gardener Meeting	The Good the Bad and the Ugly: Weed suppressive and Non-Invasive landscape plants.	25
9/13/2016	Syracuse (Onondaga)	Fall Arborists Conference	Plant Pathology Nitty-Gritty	97.5
9/14/2016	Elmsford (Westchester)	Managing Pests Around the Home Series	Take the Sting Out of Fall: How to Manage Stinging Insects	6
9/16/2016	(Suffolk)	Christmas Tree IPM In-depth	Monitoring Tools and Helpful Resources for Your IPM Program	1800
9/22/2016	Stony Point (Rockland)	Master Gardner Training	Introduction to Entomology and Integrated Pest Management	48
9/22/2016	Rochester (Monroe)	Rochester healthy home networking meeting	Update on statewide school environmental health initiative	6
9/24/2016	Awkesasne (Franklin)	IPM/Pollinator Protection Forum	Invasive Pests	12
9/24/2016	Hogansburg (Franklin)	IPM Pollination Protection Forum	IPM for Garden Pests	7.5
9/26/2016	Syracuse (Onondaga)	Fall Arborists Conference	Integrated Pest Management for Conifers	97.5
9/29/2016	Freehold, NJ	NJPMA Fall Conference	Rodent Control: What We Have Learned	40
9/29/2016	Blue Mountain Lake (Hamilton)	Fall AESHP Workshop	IPM Programs Update	26
10/1/2016	Melville (Nassau)	NYPMA Fall Conference	Rodentology and Pest Management	70
10/5/2016	Carmel (Putnam)	Master Gardener Training	Insect Identification	175
10/6/2016	Big Flats (Chemung)	Senator O'Mara's Lyme Disease Awareness Forum	How to Identify, Avoid and Remove Ticks	35
10/6/2016	Los Angeles, CA	GreenBuild International Expo and Show	"Designing Pests and Pesticides out of Green Buildings"	45
10/10/2016	Albany (Albany)	Making Connections Conference	IPM Table	30



10/11/2016	New Orleans, LA	City of New Orleans & the Greater New Orleans Pest Control Association Pest Control Academy	The Dirt on Filth Flies	30
10/11/2016	New Orleans, LA	"	Pathogens and Ectoparasites of Norway Rats in NYC and New Orleans	30
10/11/2016	New Orleans, LA	"	Biology and Management of Cockroaches	30
10/11/2016	Metairie, LA	"	The Dirt on Filth Flies	14
10/12/2016	New Orleans, LA	"	Scientific Monitoring	45
10/12/2016	New Orleans, LA	"	Arthropod Identification	60
10/14/2016	Liberty (Sullivan)	Master Gardener Training	Entomology and Integrated Pest Management	36
10/16/2016	Rotterdam (Schenectady)	Fall Foliage Festival	IPM Table	140
10/18/2016	Albany (Albany)	Bed Bug Training	Fight the Bite! Bed Bug IPM	19
10/18/2016	Albany (Albany)	Bed Bug Training	Fight the Bite! Bed Bug IPM	15
10/20/2016	Middletown (Orange)	Master Gardener Training	Entomology & Invasive Insects	137.5
10/21/2016	State College, PA	Pennsylvania Vector Control Conference	Harboring Secrets: Pathogens and Ectoparasites of Norway Rats in NYC	56
10/26/2016	Elmsford (Westchester)	Managing Pests Around the Home Series	Avoiding and Managing Ticks Around the Home	7
11/1/2016	Voorheesville (Albany)	Master Gardener Training	Entomology & Household Insect Pests	270
11/4/2016	Ithaca (Tompkins)	One Health + Public Health + Global Health Symposium	Lyme Disease: an avoidable or unstoppable epidemic?	32.5
11/11/2016	Fort Lee, NJ	The 2016 New York Pest Expo "Young Guns" Edition	Fleas and Bed Bugs: These Insects Bite!	509
11/16/2016	Rochester (Monroe)	Turf & Grounds Expo	Stinging Insect Case Study	27.5
11/16-17/16	Rochester (Monroe)	Turf & Grounds Expo	Tick Table	7.18
11/17/2016	Rochester (Monroe)	Turf & Grounds Expo	IPM Systems for Turf in the Landscape	85
11/17/2016	Rochester (Monroe)	Turf and Grounds Expo	Planning for Sustainable Pest Management of Trees and Shrubs	85
11/18/2016	Troy (Rensselaer)	Bed Bug Training	Fight the Bite! Bed Bug IPM	20
11/18/2016	Troy (Rensselaer)	Bed Bug Training	Fight the Bite! Bed Bug IPM	25
12/10/2016	Hauppauge (Suffolk)	Long Island Regional Landscape Conference	Planning for Sustainable Pest Management of Trees and Shrubs	45
<b>TOTAL</b>				<b>10,051</b>

### Results and discussion:

Although much of the work done by NYS IPM educators is area-specific (school IPM, turfgrass management, bed bug outreach) some does not fall into such a category, and yet it represents a significant need in New York. The variety of pests encountered in homes and landscapes is

large and the means of controlling such pests are varied from doing nothing to using pesticides that may pose risks to human health. The need for IPM awareness and adoption is as strong as ever.

Social media continues to expose more people as likes and followers increase annually. These followers then share posts, which vastly increases the number of viewers to any given post. Between our social media platforms, nearly 1,000 followers has translated to 593,049 impressions, many of which link back to NYS IPM Program resources.

NYS IPM staff members helped train professional pest managers in structural, wildlife and landscape management. Over the past decade a shift toward the adoption of IPM has been apparent in the professional pest management industry. From the promotion of key IPM tenets, such as pest prevention, to support of the adoption of IPM in schools, the National Pest Management Association has embraced IPM and the extension programs supported by IPM funds. In 2016, Community IPM staff offered 117 presentations in 25 New York counties, seven additional US States, the Virgin Islands and Puerto Rico, resulting in over 10,000 contact hours of training. Topics included: IPM in schools, childcare centers, buildings, turf (golf, sports field, grounds), and food establishments. Programs were developed to help individuals and organizations better manage geese, bed bugs, stinging insects, ticks, rodents, public health pests, and landscape pests. Presentations also covered pollinators, wildlife damage, overseeding research, and pesticide safety.

In 2016, presentations using content developed for the Structural (Urban) IPM Short Course were offered to Master Gardner Volunteers and pest management professionals. These workshops emphasize pest identification, and use actual pinned specimens of arthropods in vials to reinforce on-screen identification. A total of seven trainings were offered in 2016, reaching 232 individuals for a total of 918.5 contact hours. The Structural IPM Short Course remains in demand, with two presentations to the pest management industry scheduled for 2017.

An ongoing project that will be completed in 2017 is the Compendium of Household Items and Treatment for Bed Bugs. This two-part document describes methods that individuals can use to clear their belongings of bed bugs. This document is unique in that it organizes items alphabetically, allowing individuals to find detailed information about cleaning a specific item. The document is currently 34 pages long, and will include nearly 100 images describing practices and protocols.

### **Samples of Resources Developed**

Flickr: <http://www.flickr.com/photos/99758165@N06/>

Fact sheet: <http://tinyurl.com/nmcpyxr>

Facebook Page: <https://www.facebook.com/NYSIPM>

NYS IPM Blog: <http://blogs.cornell.edu/nysipm/>

School IPM Blog: <http://blogs.cornell.edu/schoolchildcareipm/>

YouTube Channel: <https://www.youtube.com/user/NYSIPM>